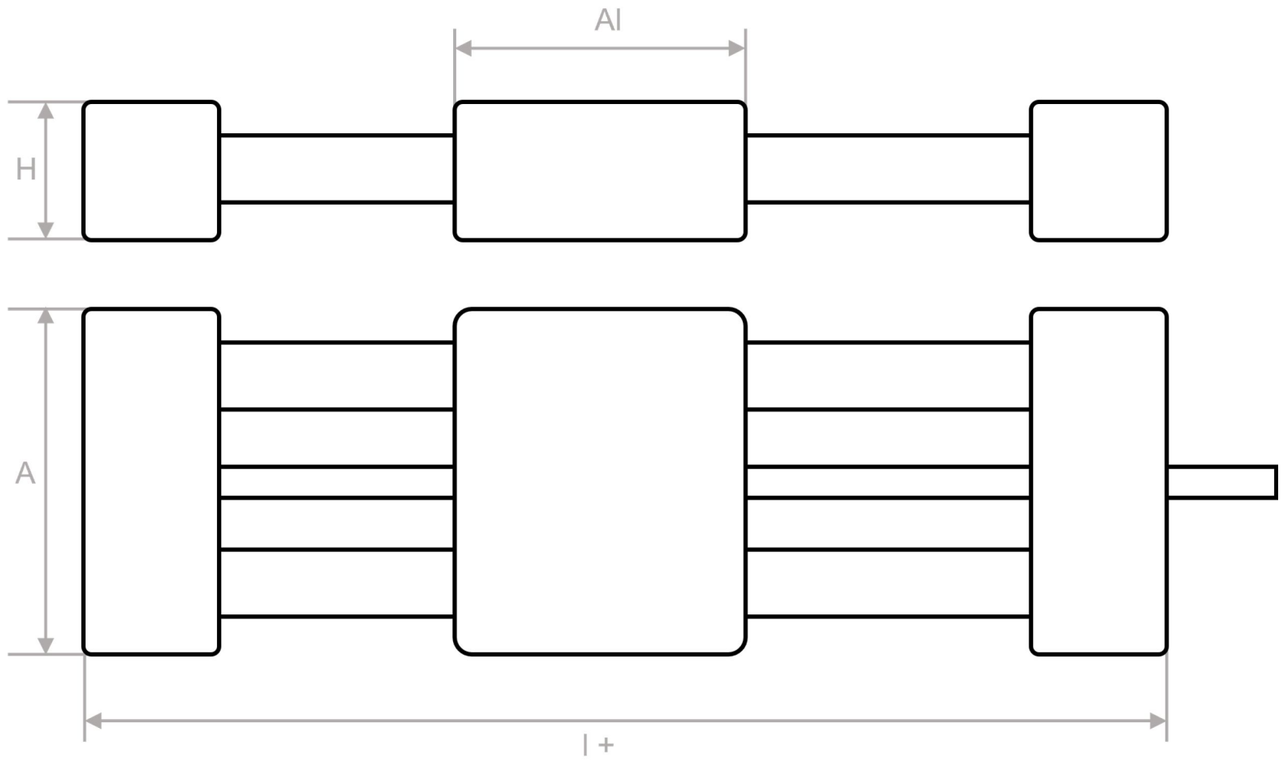
Data sheet drylin® drive technology

Content:



drawing without dimensions
exemplary illustration

Linear Module SLW-BB-0630
SLW-BB-0630-DS8X10

Diagram 1: Stroke / speed

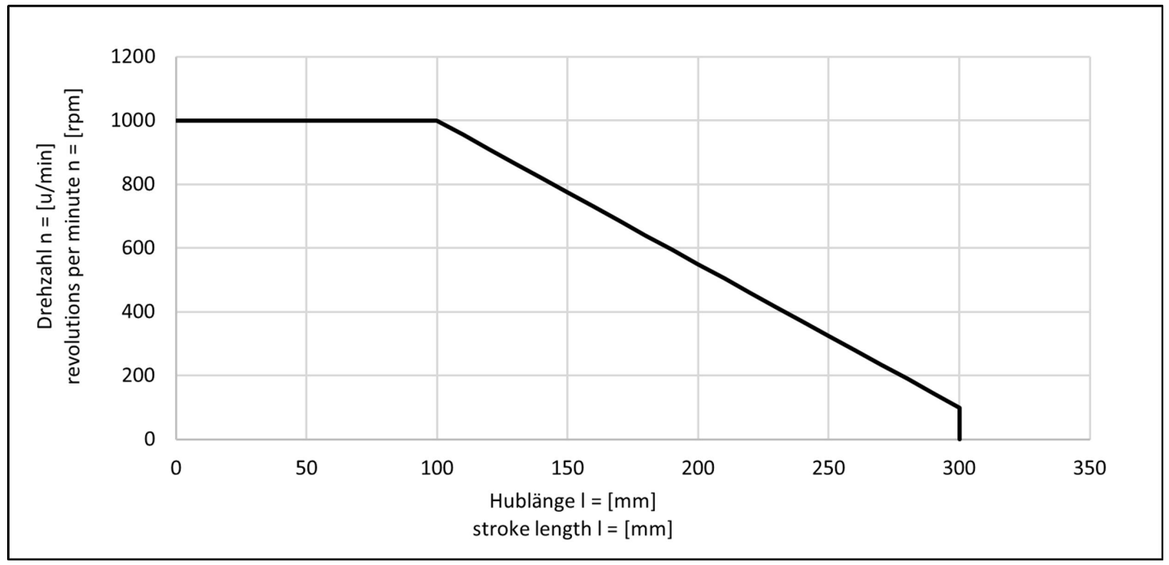
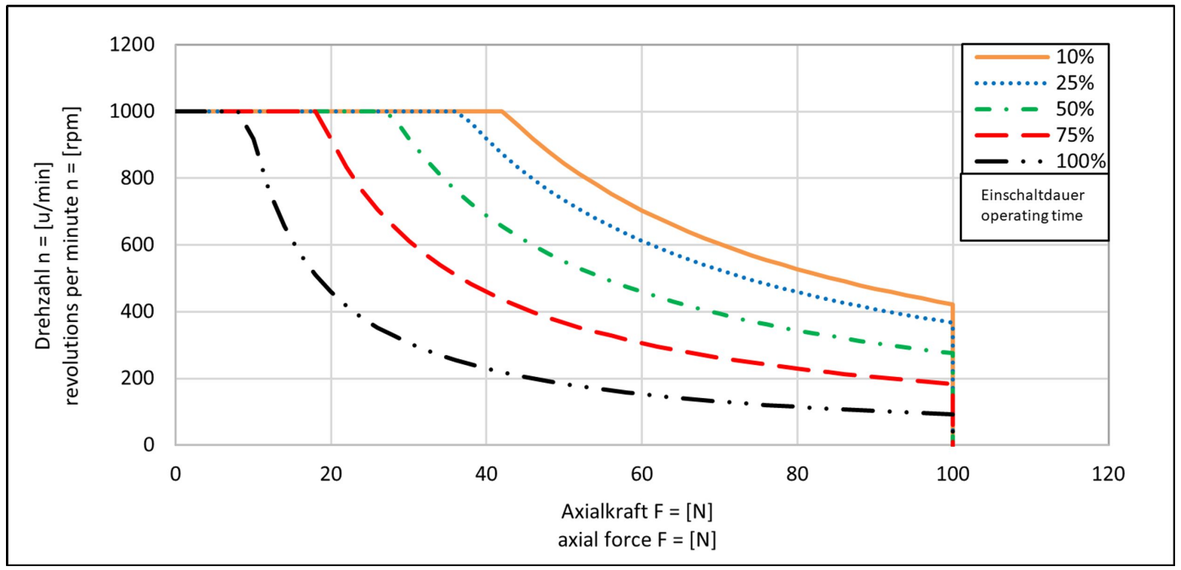


Diagram 2: Axial force / speed



Thread size: DS8X10
Stroke [mm]: 100; lead screw support: BB
Nut length [mm]: 15 mm

Technical data

Thread size	max. perm. speed [1/min]²	max. perm. drive torque [Nm]²	max. perm. radial load²	max. perm. axial force [N]²	Wear limit linear bearing [mm]	Wear limit nut [mm]
DS8x10	1000	0.4	400	100	0.5	0.48

Dimensions and weight

Carriage Length Al [mm]	Width (A) x Height (H) x Length (L+Stroke) [mm]	Maximum permissible stroke [mm]³	Base weight aluminium [kg]	Additional weight aluminium [kg/100mm]
20	54 x 20 x 60	300	0.16	0.08
60	54 x 20 x 112	300	0.32	0.08
100	54 x 20 x 152	260	0.37	0.08

²Maximum values! These values are maximum values and apply only to one criterion. Combined load data can be found in the diagrams. In addition, these speed and load data only apply to the linear bearing and threaded nut material iglidur® J
³A deviating stroke length affects the load data

Further information on travel speeds, accelerations, service life etc. can be found in the online tool: igus.eu/DDX

Linear Module SLW-BB-0630
SLW-BB-0630-DS8X15

Diagram 1: Stroke / speed

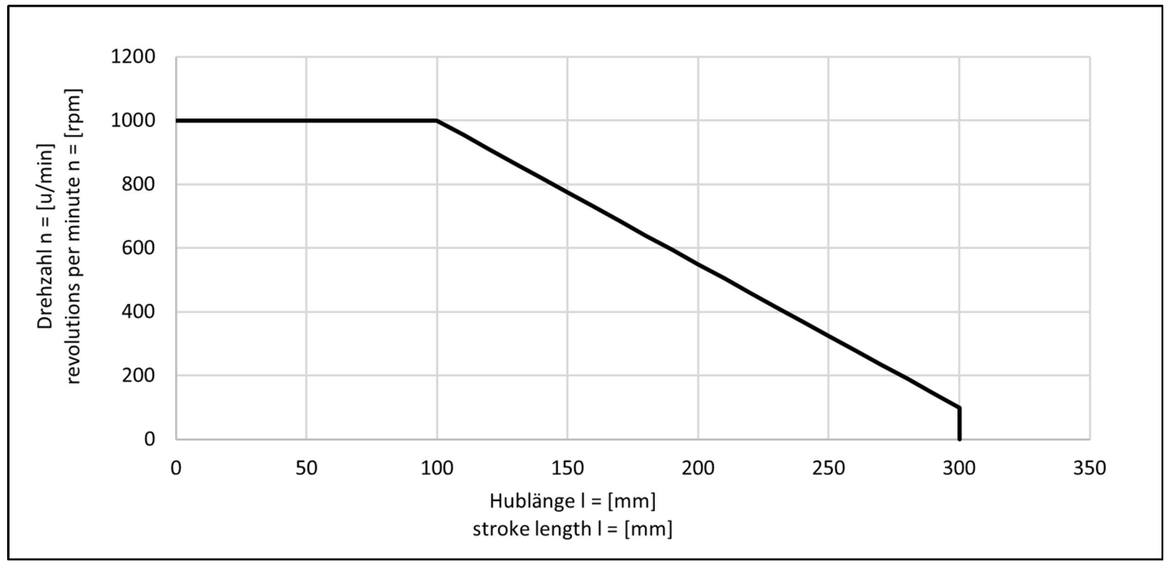
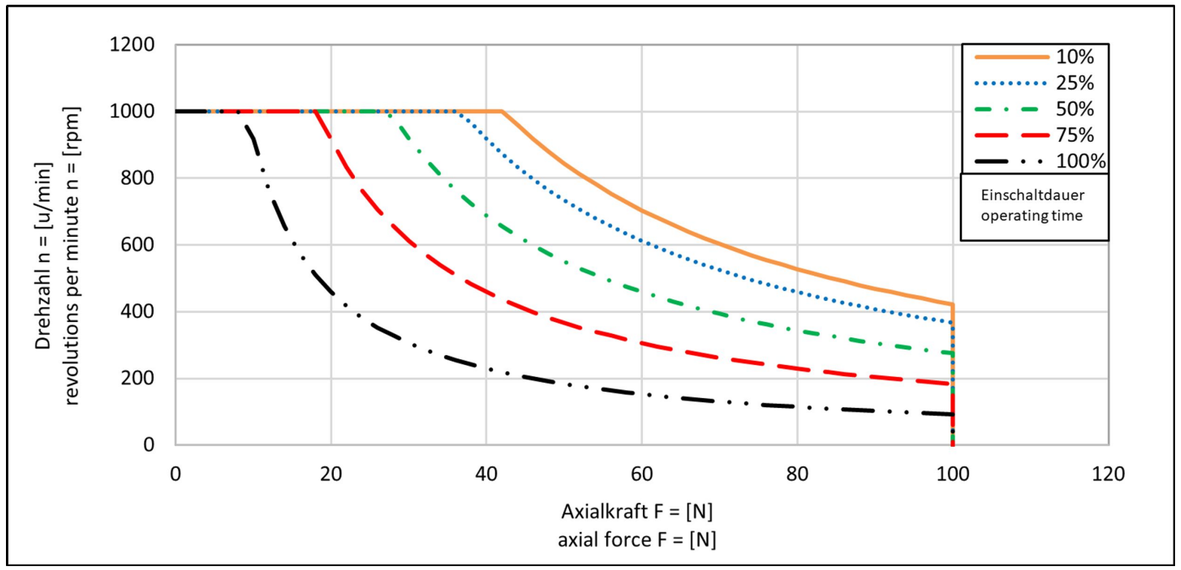


Diagram 2: Axial force / speed



Thread size: DS8X15
Stroke [mm]: 100; lead screw support: BB
Nut length [mm]: 15 mm

Technical data

Thread size	max. perm. speed [1/min]²	max. perm. drive torque [Nm]²	max. perm. radial load²	max. perm. axial force [N]²	Wear limit linear bearing [mm]	Wear limit nut [mm]
DS8x15	1000	0.5	400	100	0.5	0.48

Dimensions and weight

Carriage Length Al [mm]	Width (A) x Height (H) x Length (L+Stroke) [mm]	Maximum permissible stroke [mm]³	Base weight aluminium [kg]	Additional weight aluminium [kg/100mm]
20	54 x 20 x 60	300	0.16	0.08
60	54 x 20 x 112	300	0.32	0.08
100	54 x 20 x 152	260	0.37	0.08

²Maximum values! These values are maximum values and apply only to one criterion. Combined load data can be found in the diagrams. In addition, these speed and load data only apply to the linear bearing and threaded nut material iglidur® J
³A deviating stroke length affects the load data

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Linear Module SLW-BB-0630
SLW-BB-0630-TR8X1.5

Diagram 1: Stroke / speed

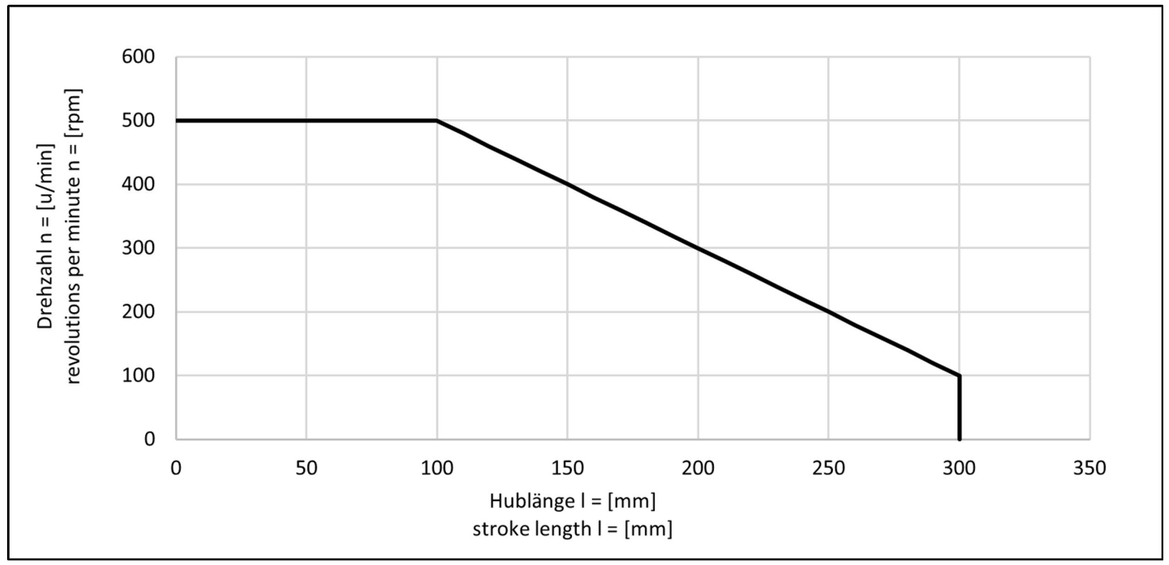
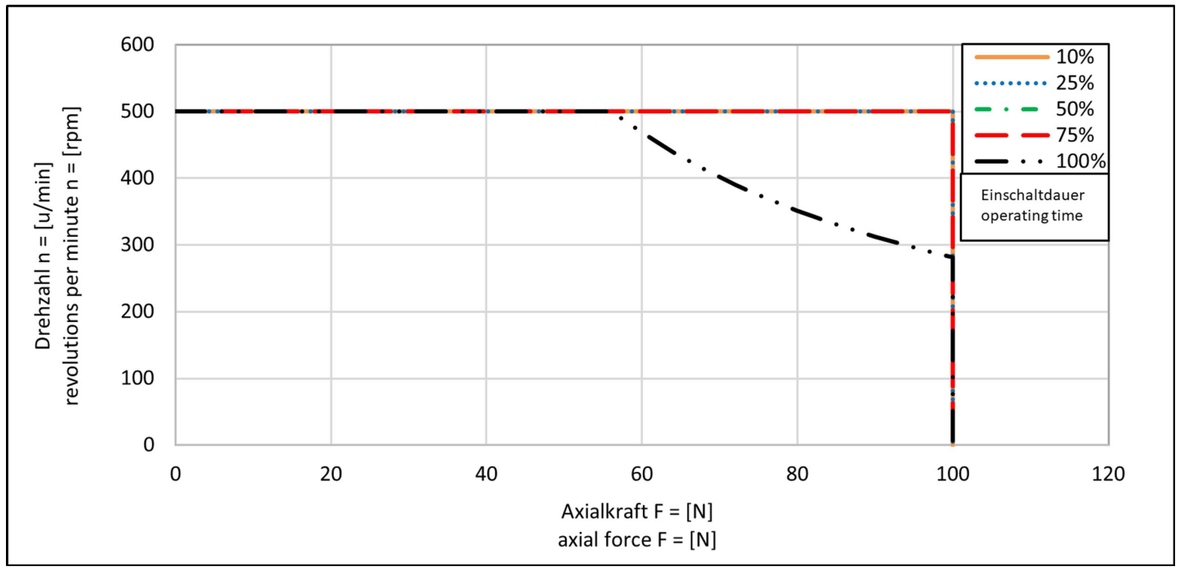


Diagram 2: Axial force / speed



Thread size: TR08X1.5
Stroke [mm]: 100; lead screw support: BB
Nut length [mm]: 15 mm

Technical data

Thread size	max. perm. speed [1/min]²	max. perm. drive torque [Nm]²	max. perm. radial load²	max. perm. axial force [N]²	Wear limit linear bearing [mm]	Wear limit nut [mm]
TR08X1.5	500	0.2	400	100	0.5	0.25

Dimensions and weight

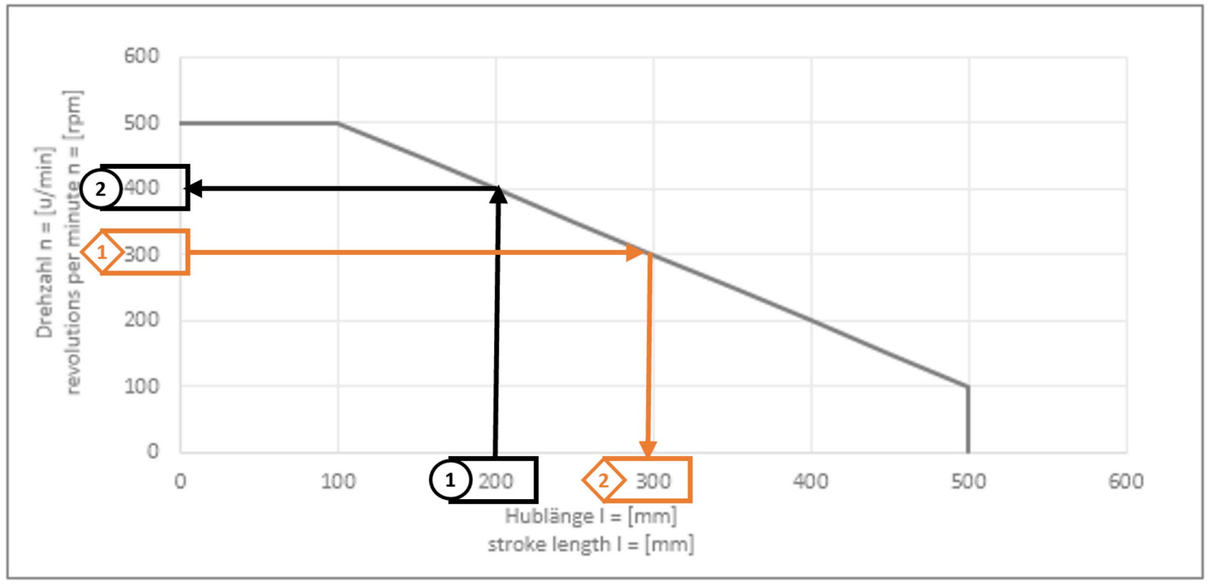
Carriage Length Al [mm]	Width (A) x Height (H) x Length (L+Stroke) [mm]	Maximum permissible stroke [mm]³	Base weight aluminium [kg]	Additional weight aluminium [kg/100mm]
20	54 x 20 x 60	300	0.16	0.08
60	54 x 20 x 112	300	0.32	0.08
100	54 x 20 x 152	260	0.37	0.08

²Maximum values! These values are maximum values and apply only to one criterion. Combined load data can be found in the diagrams. In addition, these speed and load data only apply to the linear bearing and threaded nut material iglidur® J
³A deviating stroke length affects the load data

Further information on travel speeds, accelerations, service life etc. can be found in the online tool: igus.eu/DDX

Reading example
Linear Module SLW-BB-0630

Reading example diagram 1: Stroke / speed



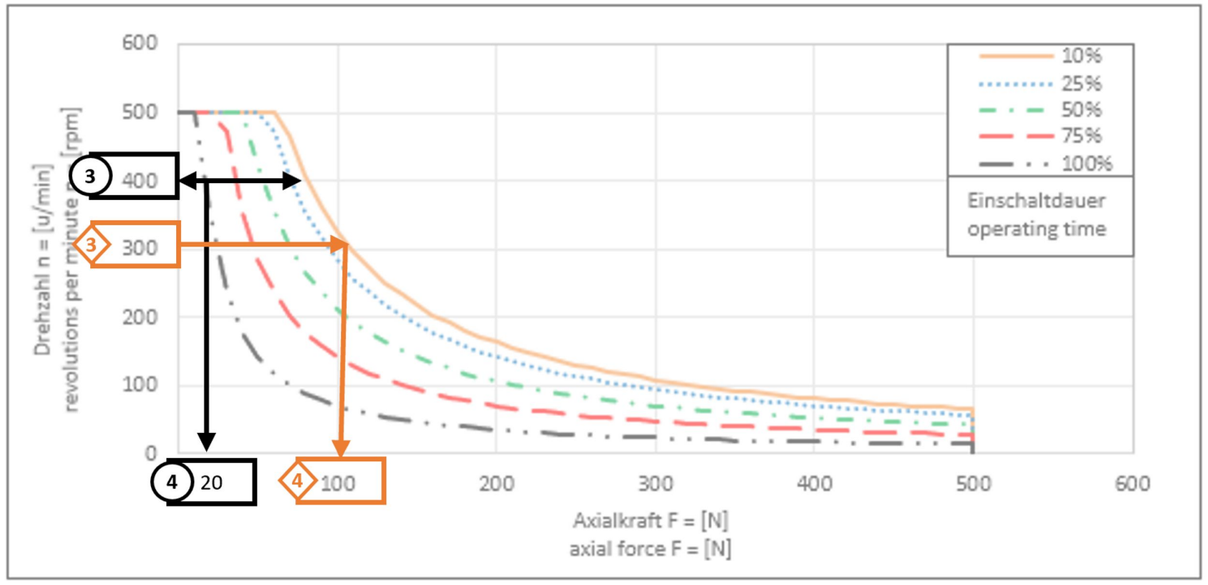
Example 1 (black): available stroke = 200 mm

Based on the existing stroke length ① the permissible speed can be determined. ②

At **200** mm stroke ① a permissible speed of **400** U/min ② can be determined.

Based on the permissible rotational speed ③, the permissible axial force ④ can be read as a function of the duty cycle (diagram legend). abgelesen werden. With a duty cycle of 100% and a speed of **400** U/min ③ a permissible axial force of **20 N** ④ can be determined.

Reading example diagram 2: Axial force / speed



Example 2 (orange): rotational speed = **300** rpm

Dependent on the required speed ① the permissible stroke ② can be determined. At a speed of **300** rpm ① a permissible stroke length of **300** mm ② can be determined.

Based on the speed ③ the permissible axial force ④ can be read as a function of the duty cycle (diagram legend). With a duty cycle of 10% and a speed of **300** rpm ③ a permissible axial force of **100 N** ④ can be determined.

Hint!

The diagram 2: Axial force / speed only refers to stroke lengths ≤ 100mm. For stroke lengths > 100mm, the max. permissible axial force can be increased with a correction factor. The limit values from the table of technical data must not be exceeded.

$$F_k = F_{zul} * (0.008 * \text{stroke length} + 0.2)$$

Calculation example:

$$F_k = 20\ N * (0.008 * 200 + 0.2) = 36\ N$$

The corrected force can be used with the previously determined stroke-dependent speed.

Disclaimer